

**MISSION NEED STATEMENT  
FOR  
FUTURE COMBAT SYSTEM OF SYSTEMS (FCS)  
Potential ACAT 1**

2 November 2001

1. Defense Planning Guidance Element.

a. The Defense Planning Guidance (DPG), FY2003-2007, states that the Army will develop an Objective Force capable of operational maneuver from strategic distances, penetrating and sustaining operations in anti-access / area denial environments, and is less dependent upon traditional air and sea ports of debarkation, host nation support and reception infrastructure. This force will create diverse manifold dilemmas by arriving at multiple, unimproved points of entry, forcibly if necessary; overwhelming aggressor anti-access capabilities and rapidly imposing our will on opponents. The Objective Force contributes to the four national defense goals in the DPG: assure allies of U. S. national resolve, dissuade potential adversaries, deter threats, and when required, decisively defeat any adversary. The Army's responsibility to satisfy this requirement demands a future full spectrum force: organized, manned, equipped, and trained to be more strategically responsive, deployable, agile, versatile, lethal, survivable, and sustainable across the entire spectrum of military operations. In this manner, Objective Force units will arrive immediately capable of conducting simultaneous, distributed, and continuous combined arms, air-ground operations, day and night in open, close, complex, and all other terrain conditions throughout the battlespace.

b. Joint Vision 2020 requires the development of flexible, effective and efficient multi-dimensional forces capable of rapidly projecting overwhelming military combat power anywhere in the world in order to meet the National Military Strategy. Army Objective Force units will create synergy within the Joint Task Forces they populate by dominating the land dimension, where people and political authorities reside, and by forcing opponents from their protective sanctuaries or destroying them with precision fires and maneuver. The Objective Force is the Joint Force Commander's ultimate defeat mechanism in any application of the military element of national power through multi-dimensional application of dominant maneuver, precision engagement, focused logistics, information superiority, and force protection. The Army's Transformation is grounded in the operational framework of Joint Vision 2020, as well as the concepts for future joint and combined operations.

c. Army Vision (Oct 99), recently published Concept for the Objective Force, and Army doctrine including FM 1, "The Army", and FM 3-0, "Operations", present the future of our Army as a strategically responsive force, designed for success in any type of operation while optimized for major theater of war. This

force will compensate for the capabilities of expected threats on the highly ambiguous complex and dynamic battlefield of the future. Ultimately, all Objective Force decisive operations are based upon tactical success in close combat. FCS tactical units empowered by advanced technologies will employ a new operational paradigm with unprecedented capabilities to seize and control key terrain and close with and destroy enemy forces.

d. The Army's goals described above require the integration of advanced materiel solutions and the proactive application of revolutionary changes to our Doctrine, Training, Leader Development, Organizations, and Soldier functions.

## 2. Mission and Threat Analyses.

### a. Mission Need.

America's future strategic, operational, and tactical framework increases the imperative to build a full spectrum general-purpose force optimized for the offensive. The Army Objective Force will be part of a joint team that is decisive in any type operation against any level threat, in any environment. This joint team requires a force projection Army that is strategically and operationally responsive, rapidly deployable, able to change patterns of operations faster than the enemy can respond, and adjust to enemy changes of operations faster than he can exploit them—a versatile and agile force capable of dominating any situation or adversary. The hallmarks of Objective Force operations will be developing situations out of contact, maneuvering to positions of advantage, engaging enemy forces beyond the range of their weapons, destroying them with precision fires and maneuver, and assaulting decisively enemy capabilities or locations at times and places of our choosing.

The requirement for a Future Combat System of Systems (FCS) is driven by the evolving operating environment and capabilities-based threats, combined with the need for a full spectrum dominant force as described in the DPG, Joint Vision 2020, and the Army Vision. Clearly, the Army must be capable of effective response against both modernized conventional and unconventional forces employed in asymmetric strategies and tactics. The FCS mission need has application throughout the range of conflict from peacekeeping missions to major theater war (MTW).

### Definition of Future Combat System of Systems (FCS):

FCS is the networked system of systems that will serve as the core building block within all maneuver Unit of Action echelons to develop overmatching combat power, sustainability, agility, and versatility necessary for full spectrum military operations.

It is comprised of a family of advanced, networked space-, air- and ground-based maneuver, maneuver support and sustainment systems that will include manned and unmanned platforms.

FCS further includes suites of information technologies, RSTA networks, and battle command systems that will enable the tactical unit to operate at a level of synchronization heretofore unachievable.

The largest FCS systems will be lighter than current mechanized systems with each element possessing common or multi-functional characteristics. FCS units must achieve all organizational characteristics in the Army Vision.

Many FCS platforms will be multifunctional and modular, combining two or more tactical functions such as assault and indirect fires, air defense, forms of RSTA, network communications, battle command and mobility support. Other platforms such as small, unmanned aerial and ground vehicles may be single function.

FCS will enable improved situational understanding to allow Objective Force units to see first, understand first, act first and finish decisively.

In summary, FCS is not a battalion. It is a networked system of systems manned by soldiers and fighting teams of teams. It enables the small tactical units in the Unit of Action (UA) to fight:

- mounted enabled by dismounted
- dismounted enabled by mounted
- on occasion, mounted
- on occasion, dismounted

It significantly enhances the overall force effectiveness of maneuver Units of Action in ways that cannot be achieved today.

Army FCS enables combat battalions in the Objective Force Unit of Action to dominate ground combat across the entire spectrum of operations and significantly enhances their ability to conduct decisive tactical maneuver. The FCS directly contributes to the combat battalion's ability to close with and destroy enemy forces, seize terrain, protect territories and civilian populations from hostile forces, and enforce the terms of sanctioned agreements for stability and support operations. The FCS will provide ground forces with a dominant fighting System of Systems with assured overmatch for conducting standoff attack and close combat assault against any threat and in any terrain. It will be highly deployable and sustainable to meet requirements articulated in the Objective Force and Unit of Action O&Os.

(1) Strategic. The 21st Century operational environment demands dominant combat units capable of rapid deployment to multiple points of entry, without reliance on established ports, and able to conduct offensive operations immediately at entry with overwhelming combat power in order to enable decisive and early conclusion to any conflict. Enabled by enroute mission planning and rehearsal capability and reduced lodgment requirements, entry operations will orient directly on enemy forces and decisive points. The FCS must significantly contribute to the Army's ability to deploy a combat ready brigade size formation anywhere in the world within 96 hours, a division in 120 hours, and five divisions in 30 days. These objectives require combined arms force packages ready to go directly into action on arrival and capable of unprecedented sustainability over greater distances with a much smaller logistical footprint than current Legacy Forces. The FCS contributes to the Objective Force's ability as part of a Joint Force to conduct timely and responsive strategic, operational and tactical maneuver, precision engagement, and full dimensional protection.

(2) Operational. The future tactical combat force conducts air and ground maneuver over operational distances as a coherent combined arms team, prepared to fight upon arrival at the AOR. The Unit of Action must not be tethered to continuous secure lines of communication. Networked precision maneuver, fires and RSTA enables the Unit of Action to initiate combat on its own terms at a time and place of its choosing, gain the initiative and never surrender it, build momentum quickly and win decisively. FCS tactical units exploit information from external sources in order to operate over an expanded, non-contiguous, distributed battle space and integrate joint and combined Army capabilities.

(3) Tactical. The FCS enables the networked Unit of Action to develop the situation in and out of contact, set conditions and maneuver to positions of advantage, and to close with and destroy the enemy through standoff attack and combat assault as articulated in the Objective Force Unit of Action O&O. The FCS integrates reinforcing and complementary fires and maneuver in the conduct of mounted and dismounted operations. These capabilities are dominant against any adversary and effective across the full spectrum of conflict – including peacetime military engagement, smaller scale contingencies (SSCs) and MTW.

- The components and variants of the FCS must have modularity, agility, and adaptability to permit the combat battalion to achieve dominance in the following four situations: The first is combat action that is **mounted enabled by dismounted action** for tasks that are accomplished today by heavy / light forces in open, rolling, and mixed terrain. The second is **dismounted enabled by mounted action** for tasks that are accomplished today by light / heavy forces in close, complex and urban terrain. In this environment, a robust, dismounted assault capability remains critical to success. On occasion, pure **mounted action** is

appropriate (maneuver, exploitation or pursuit) in open and rolling terrain. On occasion, pure **dismounted action** is appropriate in dense, complex terrains such as mountains, jungles, ridgelines, or urban areas.

- FCS tactical units will be capable of conducting simultaneous, distributed, and continuous combined arms, air-ground operations, day and night in open, close, complex, and all other terrain conditions throughout the battle space. They will incorporate organic combined arms at the lowest tactical levels to maximize versatility, agility, and dramatically improve capabilities for the close fight. Units of Action will *see first, understand first, act first, and finish decisively* on the tactical battlefield. This leap-ahead operational capability enabled by advanced technologies brings a complete new paradigm for how tactical units will fight and win; how they will train to fight and win across the spectrum of military operations. What is different in close tactical combat is the synergy of maneuver, firepower, protection, and leadership, empowered by dominant situational awareness resident in a vibrant information network.
- To accomplish these qualities, the FCS System of Systems enables Unit of Action forces to:
  - (a) See First. To see first, forces must sense the entire environment before and more clearly than the enemy. They must be capable of visualizing the battle space to meet task / purpose at different levels, while avoiding exposure of friendly forces to enemy observation or attack. Forces must see the parts - detecting, identifying, and tracking enemy, neutral, and friendly elements - while maintaining situational awareness, enabled by a sophisticated set of sensors. Forces must also see the whole, possess the capability to aggregate and fuse the parts, and recognize enemy patterns of activity. Leaders must see the environment, including the terrain, weather, and populations. While seeing first, forces must have the capability to deny the enemy the ability to see them through deliberate actions to blind through direct attack, or by deceiving and confusing the enemy.
  - (b) Understand First. To understand first, forces must rapidly process and distribute knowledge while denying knowledge to the enemy. Forces require the ability to see and discern operational concepts, schemes of maneuver, centers of gravity, decisive points, and enemy vulnerabilities. They must distribute situational awareness and understanding throughout the forces more quickly than the enemy can gain understanding of them. Situational understanding gained through assimilating the unit of employment situational development as well as continuously developing the situation continuously allows our forces to focus

on decisive engagements. They can develop the situation while still out of contact and decide to act when and where it is most tactically advantageous. Finally, forces must simultaneously ensure that the enemy understands the situation too late or wrongly, using techniques such as deception, pattern avoidance, and irregular geometry. Seeing and understanding – a continuous and unending process – postures our forces to act first.

- (c) Act First. To act first, our forces must retain freedom of action to engage at tactical standoff, move, and re-engage while denying the enemy the same freedom to act or even to respond effectively. Wide dissemination of the commander's intent coupled with broad access to the common operational picture (COP) will provide unprecedented opportunities for subordinate initiative to exploit enemy vulnerabilities as opportunities present themselves. Tactical mobility allows the unit to develop the situation out of contact, and, then, to establish contact at the commander's chosen place and. ISR capabilities and extended ranges of fires expand the distance at which the tactical units can shape the fight and posture maneuver forces from positions of advantage to defeat the enemy. Beyond acting first, our forces must also compel the enemy to act last or act wrongly.
- (d) Finish Decisively. Our forces must destroy the enemy in detail through mounted and dismounted assault. They destroy the enemy's ability to synchronize its fight and denying the enemy freedom of action. U.S. forces engage the enemy at the time and place of their choosing, and achieve victory with synchronized combined arms. Finishing decisively demands the ability to exploit the initiative. Future combat units must follow through the assault rapidly transitioning to the next engagement.

b. Threat.

(1) Threat to be Countered. The FCS will counter tanks, reconnaissance vehicles, infantry fighting vehicles (IFV), armored personnel carriers (APC), indirect fire platforms, dismounted infantry, bunkers and helicopters. These systems are being technologically enhanced with modern armor, active and passive protection systems and improved countermeasures.

(2) Projected Threat Environment.

FCS tactical units will engage a variety of threats, many equipped with sophisticated C4ISR, upgraded combat vehicles and weapons systems, manual and robotic counter mobility systems, air defenses, long-range cannon and rocket artillery, improved munitions to include thermobaric rounds, cruise and

tactical ballistic missiles, fixed and rotary wing aircraft, UAVs, and infantry systems with improved range and lethality.

Opponents will invest to achieve regional dominance and force effectiveness against a high tech US threat. The most important threat capability is, however, within the human dimension. Our adversaries will be motivated, adaptive, and learning. They will be fully aware-- experts in their area and its implications for military operations. The opposition soldier will be well-trained, experienced in warfare on his own turf, able to deal operationally and tactically with regional opposition, and prepared mentally to engage the FCS in adaptive fashion.

The impact of evolving threats and operating environments on the conduct of future tactical operations is striking. Potential adversaries study the US closely, learning and adapting new tactics, advanced capabilities and innovative strategies. The threat - out through the year 2020, and beyond - will be less uniform and predictable, running the gamut from primitive to very sophisticated. This threat will also be more complex, because of the growth of asymmetric applications of conventional and unconventional capabilities and sophisticated application of these constructs and capabilities simultaneously and over a dispersed battlefield.

Although locations of future conflict cannot be predicted with certainty, FCS tactical units must be designed to operate in any environment, terrain, or weather, in both developed and undeveloped infrastructures, with a wide variety of complications from both environmental hazards and civilian populations. Significant environmental challenges the FCS will encounter:

- Threats capable of exploiting the advantages of all terrain types, from open and rolling, to close/complex, to urban, with weapons capabilities and tactics optimized for those settings.
- High altitudes, compartmented urban and mountainous terrain which challenge FCS line-of-sight area and tactical communications, aviation operations, and human endurance, and which define air and ground movement patterns, and canalize FCS movement.
- Sanctuaries. Future adversaries will avoid being targeted at standoff ranges. Threats will employ dispersal, cover and concealment, masking by terrain and non-combatants, and cross border positioning to achieve these effects, and be protected from FCS.
- Contaminated operational areas. Threats will employ chemical, biological, or radiological devices / weapons seeking tactical to strategic effects. Decay in aging industrial bases likewise presents opportunities to create obstacles to FCS via toxic industrial materials (TIMs). Diseases, enabled by poor sanitation, will be the norm within those environments where FCS operates.

- Poorly developed infrastructures. FCS will operate in areas where the local infrastructure is immature - transportation and communications nets, port facilities, airfields, available water supplies, et cetera, will not be up to desired standard.
- Local populations. The FCS will routinely operate in areas in which heterogeneous populations live together, where ethnic, religious, or tribal/clan tensions give rise to hostile action by elements opposing US presence. Opponents will employ civilians to support tactical operations, using them for reconnaissance, as shields, for masking movement, et cetera.
- Adverse weather. Finally, the FCS will be challenged by variable weather conditions with high temperatures, dust, and harsh winters, across a variety of environments.

The longer the enemy can delay effective US response, the greater his chances for success in regional aggression. Adversaries will attempt to keep their operations below the threshold of US involvement. If the US becomes involved, our adversaries are expected to adopt anti-access strategies. At the FCS tactical unit level, this translates to attempts to disrupt tactical momentum by interrupting flow of forces and supplies into the area of operations (AO), by restricting tactical freedom of maneuver / action, through frequent interdiction of lines of communications (LOC), targeting fixed air and sea ports of debarkation, and other airfields and likely LZs across the AO. Anti-access capabilities the FCS will confront include raids and ambushes, complex obstacles and command detonated booby traps, use of theater ballistic or inexpensive cruise missiles, long-range rocket artillery, weapons of mass effects, terrorist operations, as well as an array of other unconventional, asymmetric means and information operations.

Once the US intervenes, the enemy will execute a tactical concept that leverages his detailed understanding of terrain and weather, and includes the following key elements:

- Fight dispersed to avoid targeting by US strategic weapons. To counter the FCS, adversaries will use cover and concealment to facilitate offensive and defensive action, masked by terrain and non-combatants, and executing engagements to create effects vice tactical decision
- Use a sophisticated combination of state-of-the-art and primitive, but reliable, C4ISR to enable cumulative effects of integrated small unit direct action at the time and place of his choosing
- Dismantle ability to integrate combined arms, to include air-ground operations through attack on systemology
- Ambush aviation through offensive air defense
- Attack and destroy unsupported arms and isolated nodes, through use of air, fires, mobile reserves and ISR
- Mass effects against high payoff targets (HPT) as opportunity presents



- Conduct decentralized operations coordinated through a hardened command and control (C2) structure
- Operations - movements, reconnaissance, direct action and sustainment - during night and adverse weather
- Long range fires, air (including UAV), special operations forces (SOF), paramilitary, terror, and unconventional capabilities to deny sanctuary to high value assets

If delays in US deployment permit, the enemy is able to transition and fully set ground defenses in a manner designed to deal with US forces, he will deny air and ground maneuver, forcing the FCS into unfavorable engagements. To reduce system overmatch and complicate US targeting, the adversary will disperse and operate from areas of physical and moral sanctuary, often located in complex, urban terrain, shielded by civilians and man-made structures. He will make optimum use of tunnels and prepared fortifications, hardened communications, stockpiled logistics and will preclude the use of obvious air and ground avenues of approach to fortified areas. Enemy C2 will be redundant and resilient. Prolonged massing of FCS, or associated support systems, will invite attack by both conventional and unconventional forces. At the tactical level, where the FCS operates, the threat offensive focus will be on a system warfare approach where the objective of combat action is to rob the US force of its networked "system-of-systems" synergy. This will mean continuous attacks against a specific capability using all means available until that capability is destroyed.

The opponent will engage the FCS tactical unit in multiple dimensions - air, space, cyber and information, as well as ground. Cyber attacks will be a routine characteristic of the FCS threat. The threat information operations campaign will challenge the FCS within the AO, and back to garrison and US homeland, attacking what is considered the weakest link of US forces - the human dimension. Threat air may include limited rotary and fixed wing operations - normally operating from shelter or other sanctuary when opposing the FCS, and cruise missiles. The greater tactical air threat to the FCS, however, is UAVs, to include attack variants, which will be a common feature of the FCS operating environment.

In the final analysis, the FCS's greatest challenge will be to dominate an adversary who is implacable, who is thoroughly nested within his environment, who at the tactical level is willing to risk and lose all in the interests of broader operational and strategic objectives. This opponent will not routinely seek decisive combat, but rather continuous engagement designed to exhaust and frustrate US intentions. Technology enhancements available to this future opponent will be robust, often enabling him to challenge successfully at desired times and places on the future battlefield.

c. Shortfalls of existing capabilities. These three reasons mandate Army transformation. First – a future operational environment that poses complex, adaptive and asymmetric threats equipped with advanced technologies. Second is the requirement to employ land forces that are decisive at every point on the spectrum of operations, in any terrain - in all weather. Finally, the Army must be far less reliant on forward stationing and pre-positioned stocks. Rather, it must be capable of deploying anywhere in the world on little or no notice to fight and win. These shortfalls are highlighted:

- Currently, US forces are optimized for unique points on the spectrum. Therefore, they are not readily capable of full spectrum operations.
- They have difficulty tailoring across the range conflict impacting the ability to gain and retain the initiative.
- They are currently only able to train systems, but we execute system of systems on the battlefield.
- We have difficulty transitioning to missions, directives, and task organization while in and out of contact limiting the ability to maintain freedom of action and agility.
- We cannot develop the situation out of contact effectively for tactical units due to a lack of situational awareness that does not permit us to see the enemy - the parts, the whole, and the what's next.
- We cannot keep fires, maneuver and RSTA synchronized in real time – and can only do so sequentially and with inherent latencies.
- We have difficulty adapting to different enemies and terrain and transitioning in and out of conflict.
- There is no single force that is capable in all terrain. US light forces have served us well for many years. Our light forces are strategically responsive and rapidly deployable, but none are dominant at every point on the spectrum. Light forces lack staying power, survivability, tactical mobility, and have limited ability to sustain combat power. The Army's heavy forces remain dominant on today's battlefield during MTW and upper end SSC; however, they are not quickly deployable and require an extensive logistical footprint. Further, they lack tactical mobility in constrained terrain or where the infrastructures are poorly developed.
- Sustaining combat power in light / heavy operations is difficult in the current force structure due to a lack of commonality, which inhibits sustainability.
- Current C4ISR architecture does not enable complete networked and non-line-of-sight communications effective on the move. The Interim Brigade Combat Team (IBCT) provides a near term solution to responsiveness, and is optimized for the lower end of conflict and needs augmentation to operate in an MTW. Training support structures and products do not enable commanders to train agile, mobile, flexible and lethal soldiers, units and battle staffs for the full spectrum of conflicts.

3. Non-Materiel Alternatives. The revolutionary changes required to achieve the Objective Force transcend all DTLOMS domains; however, DTLOS changes alone cannot achieve Objective Force capabilities. The Objective Force concept will require the synergistic application of new and existing materiel technologies, doctrine, training methods, organizational designs, and fully trained and adaptive leaders as well as multi-functional soldiers.

#### 4. Potential Materiel Alternatives.

a. Known current alternatives. None of the materiel solutions currently available among the services, allied nations, or on the commercial market fully meet all of the needs outlined above. These systems lack the combination of deployability, mobility, lethality, survivability, and sustainability potential necessary to operate across the full spectrum of future conflict. Expected technology achievements over the next several years will provide leap ahead enhancements not available to current materiel alternatives.

b. Potential for inter-Service or allied cooperation. Joint implications are fundamental to success of our future operations. We will deploy and fight as a joint force. Similarly, we will often operate as part of a combined force, as we have done in the past. The potential for inter-Service and allied cooperation is deemed high due to the multi-mission/multi-role nature of FCS and the increasing reliance on industrial teaming across corporate and national boundaries to capitalize on technical expertise.

c. Potential areas for concept exploration. Numerous advanced technologies that are being developed in the Science and Technology (S&T) base provide rich opportunities for concept exploration and if successful, could benefit the FCS by providing unprecedented combat capabilities. A partial list of high payoff areas for further exploration includes power and energy; light weight materials; advanced survivability; Chemical, Biological, Radiological, Nuclear, and High Yield Explosives (CBRN-E) protection; RSTA (all-weather) and C4ISR; lethal and non-lethal enhancements for line of sight, beyond line of sight, and non-line of sight fires and effects; mine detection and neutralization; counter-mobility; unmanned systems; advanced airframes; decision aids; and training and sustainment technologies.

#### 5. Constraints.

a. Infrastructure Support. The FCS must have lower operating and support costs compared to current combat systems. The FCS must have significantly improved reliability to reduce required maintenance and supply requirements, and must be supportable by current and projected maneuver support and maneuver sustainment assets. The FCS must be intra and inter theater

transportable in an employable configuration on current and proposed strategic and tactical transport aircraft, maritime pre-positioned ships, shallow draft high-speed sealift, and landing craft, and rail and ground transportation assets.

b. Manpower and Personnel. The FCS must be designed to optimize crew size and operation by multi-functional crewmembers. The increased reliability and sustainability of FCS will allow the Army to shift emphasis and manpower to the warfighter and reduce forward deployed logistic manpower requirements.

c. Training. Training must be inherent in FCS design. Embedded training systems must be easy to use, maintain, and sustain. The FCS must enable units to rapidly deploy without the need for system specific training prior to deployment and without placing an unacceptable burden on the soldier or individual platform. It must provide common training and training support capabilities in live; constructive, and virtual environments for use at the institution, home station, combat training centers, and deployed theaters. It must include individual and unit training that provide realistic experiences and be usable before, during, and after deployments and while stationary or on the move. Embedded training must allow individual and collective training on a digital terrain representation of the mission area and permit mission planning and rehearsal in both stand-alone and networked modes while enroute. The FCS training architecture must facilitate individual, crew, unit, command and battle staff training proficiency without operation of the system and with the same controls used to operate the system.

d. Environmental. The FCS must comply with all U.S. and environmental laws and regulations and to the maximum extent possible, all international laws and regulations. The FCS must be capable of conducting combat operations in all weather conditions, including hot, temperate, and cold climates. The FCS must be capable of operating in all terrain types to include complex and urban. The FCS must be able to operate in all environmental conditions to include NBC, electronic warfare, and toxic industrial chemical environments.

e. Standardization and Interoperability. The FCS will be standardized and interoperable with the other Services and allies to the greatest extent possible. Standardization will be accomplished by conforming to the DOD Technical Architecture Framework for Information Management, Joint Technical Architecture, and the Army Technical Architecture. The FCS will be designed to incorporate interoperability features at both the entity and unit level as these technologies are fielded. The FCS must be designed to operate with coalition partners for multi-national operations. The FCS design must be coordinated with development of the Future Transport Rotorcraft and Advanced Tactical Transport aircraft programs to ensure interoperability.

f. Command, Control, Communications, Computers, Intelligence Surveillance and Reconnaissance (C4ISR). The FCS must be compatible and interoperable with Legacy Army, Joint, National, and Coalition C4ISR systems ensure success

of these rapidly deployable forces. The ability to “see first” and “understand first” is dependent on the ability to maintain C4ISR.

6. Joint Potential Designator. Joint interest.